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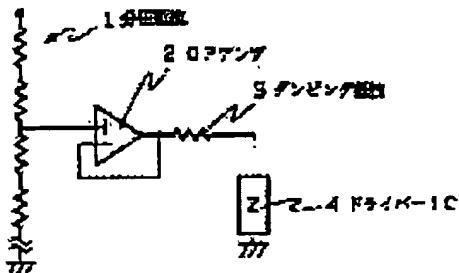
(54) VREF VOLTAGE GENERATING CIRCUIT OF LIQUID CRYSTAL DISPLAY DEVICE

(57) Abstract:

PROBLEM TO BE SOLVED: To suppress the distortion of a voltage waveform and to obtain high picture quality by providing an OP amplifier which has an output current suitable for variation in input current caused by variation in the input impedance of a driver IC.

SOLUTION: The OP amplifier 2 of the Vref voltage generating circuit is connected between driver ICs 4 so as to stabilize a gradation voltage generated by a voltage dividing resistance 1. Then to prevent the output waveform of the OP amplifier 2 from being distorted owing to fluctuation in input current due to fluctuation in the input impedance of the driver ICs 4, the output current of the OP amplifier 2 has performance matching the fluctuation in the input impedance of the driver ICs 4 and the fluctuation in the current is suppressed.

Consequently, the liquid crystal display device can be obtained which never malfunctions against fluctuation in the input impedance of the driver ICs 4 in addition to the capacity load of liquid crystal and a transparent electrode resistance with an OP amplifier of a Vref voltage generation circuit.



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